

Notice of Allowability

Application No.

10/528,080

Examiner

Kamran Afshar, 571-272-7796

Applicant(s)

HIRVONEN ET AL.

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/15/2005 & 6/13/2007.
2. ☒ The allowed claim(s) is/are 1-3, 7-16, 20 and 22-34.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 03/15/2005
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


GEORGE ENG

SUPERVISORY PATENT EXAMINER

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-3, 7-16, 20 and 22-34 allowed.
2. The following is a statement of reasons for the indication of allowable subject matter: 1-3, 7-16, 20 and 22-34.

With respect to claim 1, Meago (EP 1 418 782 A1) is the closest prior art to the application invention which discloses quality of service based traffic management method in a mobile communication network having multiple radio access technology (See Title, Figs. 3-6) and the core network (See e.g. CN network, Page 2, Line 50).

Longoni (U.S. 6,968,192 B2) discloses a method and system for performing cell load control in a mobile radio network using diversity connection between base stations (See Title, Lines 1-3 of Abstract, Figs. 1-3).

Brouwer (U.S. 6,760,303 B1) discloses channel type switching based on cell load by measuring traffic load in a cell, which the user is located (See e.g. Title, Abstract, Co. 4, Lines 15-17, Figs. 1-13). However, the prior art of record fails to disclose singly or in combination or render obvious that determining a transport capacity limit for the radio cell based on the transport capacity information; signalling the transport capacity limit of the radio cell to the base station; adjusting, in the base station, the radio capacity information based on the transport capacity limit; signalling from the base station the adjusted radio capacity information on the radio cell; managing radio resources of the radio network by using the signalled adjusted radio capacity information on the radio cell.

With respect to claim 14, the prior art of record fails to disclose singly or in combination or render obvious that the transport resource management unit is configured to determine a transport capacity limit for a radio cell based on the transport capacity information; wherein the transport resource management unit is configured to signal the transport capacity limit of the radio cell to the base station; wherein the base station is configured to adjust the radio capacity information on the radio cell based on the transport capacity limit; wherein the base station is configured to signal the adjusted radio capacity information on the radio cell to the radio resource management unit to be used in managing radio resources; and

Art Unit: 2617

wherein the radio resource management unit is configured to manage radio resources of the radio network by using the signalled adjusted radio capacity information on the radio cell.

With respect to claim 29, the prior art of record fails to disclose singly or in combination or render obvious that the transport resource management unit is configured to determine a transport capacity limit for a radio cell based on the transport capacity information and to signal the transport capacity limit to the base station for the adjustment of the radio capacity information based on the transport capacity limit and for signalling the adjusted radio capacity information to the radio resource management unit for managing radio resources of the radio network by using the signalled adjusted radio capacity information.

With respect to claim 30, the prior art of record fails to disclose singly or in combination or render obvious that the radio resource management unit being configured to receive radio capacity information on the radio cell, wherein the radio resource management unit is configured to manage radio resources of the radio network by using signalled adjusted radio capacity information on the radio cell, the signalled adjusted radio capacity information being signalled from a base station and being adjusted based on a transport capacity limit determined based on the transport capacity information on the transport network of the radio system.

With respect to claim 30, the prior art of record fails to disclose singly or in combination or render obvious that the transport resource management unit for managing the transport network resources and configured to receive transport capacity information on the transport network, wherein the base station is configured to adjust the radio capacity information on the radio cell based on the transport capacity limit determined based on the transport capacity information and signalled from the transport resource management unit; and wherein the base station is configured to signal the adjusted radio capacity information on the radio cell to the radio resource management unit for managing the radio resources by using the adjusted radio capacity information.

With respect to claim 30, the prior art of record fails to disclose singly or in combination or render obvious that the transport resource management unit is configured to determine a transport capacity limit for a radio cell based on the transport capacity information; wherein the transport resource management unit is configured to signal the transport capacity limit of the radio cell to the base station;

Art Unit: 2617

wherein the base station is configured to adjust the radio capacity information on the radio cell based on the transport capacity limit; wherein the base station is configured to signal the adjusted radio capacity information on the radio cell to the radio resource management unit to be used in managing radio resources; and wherein the radio resource management unit is configured to manage radio resources of the radio network by using the signalled adjusted radio capacity information on the radio cell

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Kaminski (U.S. Pub. No.: 2004/0076179 A1).

2) Laakso (U.S. Pub. No.: 2003/0171123 A1).

3) Halonen (U.S. Pub.: 2004/0132486 A1).

4) Sillasto (U.S. Pub. No.: 2005/0044130 A1).

5) Linares (U.S. Pub. No.: 2005/0094560 A).

6) Laasko (U.S. 6,671,512 B2).

7) Rasanen (U.S. 6,445,924 B1).

8) Tahkokorpi (U.S. 5,678,178).

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kamran Afshar whose telephone number is (571) 272-7796. The examiner can be reached on Monday-Friday.

If attempts to reach the examiner by the telephone are unsuccessful, the examiner's supervisor, **Eng, George** can be reached @ (571) 272-3984. The fax number for the organization where this application or proceeding is assigned is **571-273-8300** for all communications.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from

Art Unit: 2617

either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kamran Afshar



GEORGE ENG
SUPERVISORY PATENT EXAMINER